Maine Weekly Influenza Surveillance Report

February 11, 2009

Synopsis

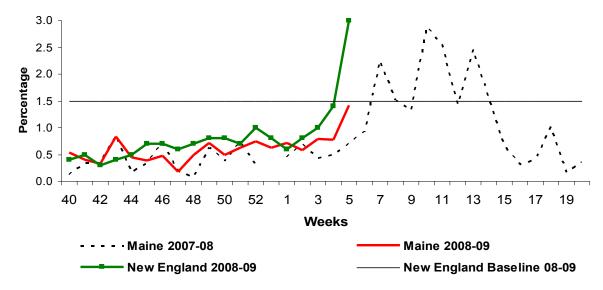
During the week ending February 7th, 2009 (MMWR week 5)*, Maine reported regional influenza activity. This week 55 cases of influenza were lab confirmed by culture or PCR. Forty nine cases were confirmed influenza A and six cases were confirmed influenza B. Influenza detected by rapid testing also increased this week, with 69 cases being reported. There were two new outbreaks of influenza-like illness reported during week 5, both in schools. Outpatient influenza-like illness visits increased this week, both in Maine, and in the New England States.

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending February 7th, 2009, 1.4% of outpatient visits reported by ten Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever ($\geq 100^{\circ} \text{ F} / \geq 37.8^{\circ}$ C) AND cough or sore throat in the absence of a known cause. In the New England States, 3.0% of outpatient visits were attributed to influenza-like illness during week 5. This shows an increase for Maine, and the first time the New England States have gone above the baseline.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

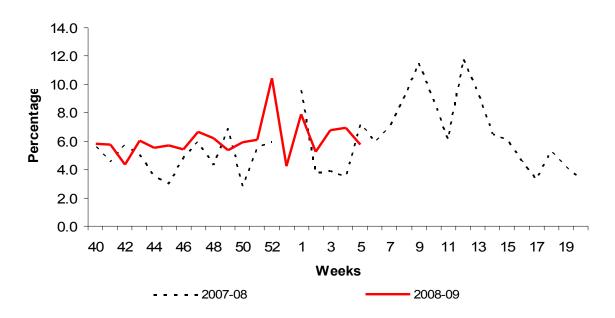
^{*} At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending February 7th, 2009, 5.7% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09

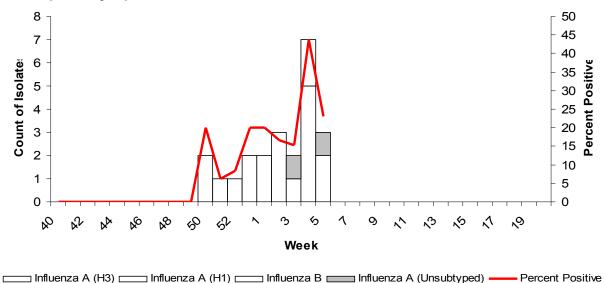


Laboratory Reporting

During the week ending February 7th, 2009, 13 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Three (23.1%) tested positive for influenza. Two were positive for influenza A, H1, and one was positive for influenza A, unsubtyped.

To date, 157 samples have been submitted, 23 (14.6%) were positive for influenza: 18 for influenza A H1, one for influenza A H3, two for influenza A unsubtyped, and two for influenza B.

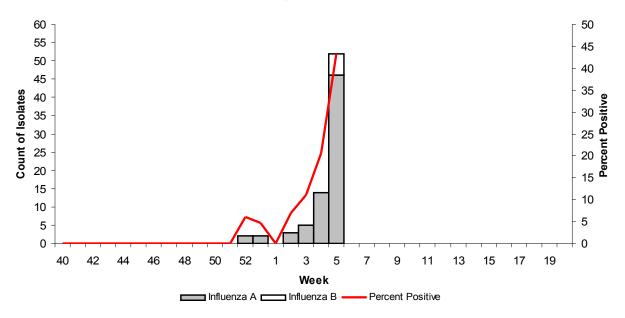
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



During the week ending February 7th, 2009, 122 samples were submitted for testing to two private reference laboratories, 46 tested positive for influenza A and six tested positive for influenza B. Fourteen samples were positive for RSV, and one sample was positive for adenovirus.

A combined total of 705 specimens have been submitted for respiratory testing to two private labs. To date, 72 samples were positive for influenza A, 6 samples were positive for influenza B, 45 samples were positive for RSV, ten samples were positive for parainfluenza 3, three samples were positive for adenovirus, and two samples were positive for enterovirus.

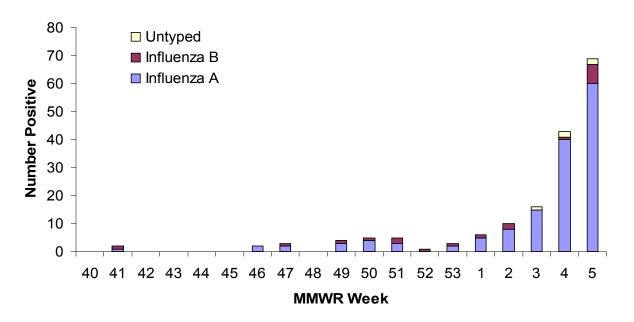
Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending February 7th, 2009, 69 samples tested positive using rapid testing, 60 for influenza A, seven for influenza B, and two untyped samples. A combined total of 169 positive rapid tests have been reported this season. One hundred forty five were positive for influenza A, 19 were positive for influenza B, and five were not typed.





Outbreaks

During the week ending February 7th, 2009, two outbreaks of influenza-like illness were reported in Maine. Both outbreaks were in schools, one in York district and one in the Penquis district. The attack rates for these outbreaks were 34% and 1% respectively. Both outbreaks were confirmed to be caused by influenza A. To date, six outbreaks of influenza-like illness have been reported; four in long term care facilities, and two in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

	Facility Type*	District	Date Reported	Attack Rate (%)		Hospital- izations	Deaths	Vaccination rate (%)		Lab- confirmed
						#	#			
				Resident	Staff			Resident	Staff	
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A
3	LTC	Western	1/26/2009	2	٨	۸	٨	٨	٨	Influenza A
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A
5	School	York	2/2/2009	34	٨	٨	٨	٨	٨	Influenza A
6	School	Penguis	2/4/2009	1	٨	٨	٨	٨	٨	Influenza A

^{*} Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥ 3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥ 1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥ 1 patients with ILI or lab-confirmed influenza with symptom onset ≥ 48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as $\geq 15\%$ absentee rate among student population due to ILI or lab-confirmed influenza.

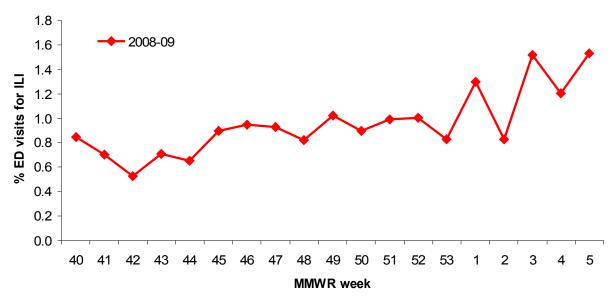
[^] Data unavailable

NA indicates not applicable

Syndromic Surveillance

1.5% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 5, based on the patients' chief complaint.

Emergency Department visits for ILI at Seven Hospitals – Maine, 2008-09

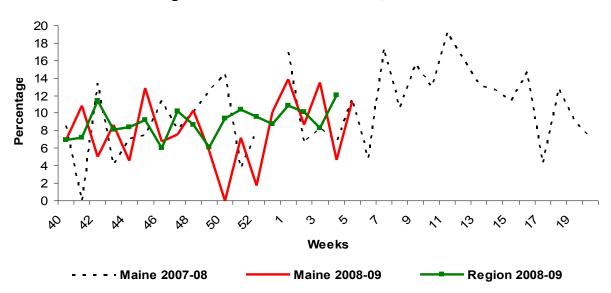


Fatalities Surveillance

Death Certificates

During the week ending February 7th, 2009, 11.4% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, New England and the United States, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

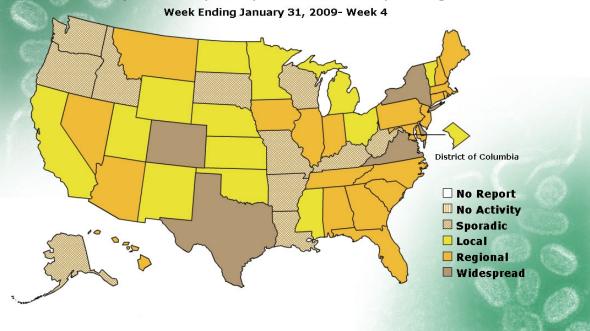
National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported regional activity for the week ending February 7th, 2009 (week 5).

FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



^{*}This map indicates geographic spread and does not measure the severity of influenza activity.